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STAFF REPORT: COMBINED CONSISTENCY CERTIFICATION AND COASTAL DEVELOPMENT PERMIT APPLICATION

CDP Application No.:	**E-01-032**
Consistency Certification	**CC-18-03**
Project Applicant:	**ExxonMobil Corporation**
Location:	In state and federal waters offshore of El Capitan State Beach in the Santa Barbara Channel, Santa Barbara County.
Project Description:	Install a new 17-mile long electrical power cable from Las Flores Canyon Processing Facility to offshore Platform Heritage to replace a failed power cable, initially remove a five-mile length of the failed cable and defer removal of the remainder, install a new five-mile long power cable between offshore platforms Hondo and Harmony, and provide fiber optic communication capability, and implement mitigation measures identified in the project's MND/EA and consistency certification.

SYNOPSIS

ExxonMobil Corporation (the Applicant) proposes to improve electrical transmission and communication capabilities between its onshore and offshore facilities in the Santa Ynez Unit (SYU) Outer Continental Shelf oil and gas lease area located in the Santa Barbara Channel. The proposed project includes replacing a failed power cable with a new power cable approximately 17 miles long between the Las Flores Canyon Processing Facility and offshore Platform Heritage, and adding a new power cable approximately five miles long between Platforms Hondo and Harmony. The new cables will include fiber optic communication capability. In addition to installing the cables, the project includes installing electrical and communication equipment on the platforms and at the Las Flores Canyon facility. The project also involves removing several sections of the failed cable, including approximately five miles of the failed cable closest to shore, a section within a tunnel and conduit at the shoreline, and a section in a J-tube on Platform Heritage. The remainder of the cable is proposed to be removed at the end of production at SYU, expected to be between 2020 and 2030.

This staff report represents a combined coastal development permit and federal consistency determination. A portion of the project lies within the Coastal Commission's retained coastal permit jurisdiction from the mean high tide line to the territorial extent of the waters of the State of California and is the subject of coastal development permit application E-01-032. Portions of the project in the federal Outer Continental Shelf are subject to federal consistency review, which is being provided in response to a permit application to the United States Army Corps of Engineers (Corps) pursuant to Section 307(c)(3)(A) of the Coastal Zone Management Act. For the portion of the project that lies in State waters, the consistency certification is redundant, as the coastal development permit serves as a consistency certification. On March 6, 2003, the Applicant submitted a consistency certification to the Coastal Commission stating that the proposed activity, including the mitigation measures in the project's Mitigated Negative Declaration/Environmental Assessment (MND/EA) and the applicant's agreed conditions, complies with California's approved coastal management program (CCMP) and will be conducted in a manner consistent with the CCMP (see Appendix B). The onshore portions of the project are within the coastal development permit jurisdiction of Santa Barbara County.

Major Coastal Act issues associated with this project include placing fill in coastal waters; potential impacts to marine biological resources, including marine mammals, eelgrass, and abalone; water quality impacts primarily due to turbidity; potential impacts to commercial fishing, public access and recreation, cultural resources, and air quality. The project includes a number of measures described in the MND/EA that will to avoid or mitigate impacts to these and other coastal resources in both state and federal waters, and the Applicant has committed in the consistency certification to those conditions (see Appendix D). Mitigation measures include:

- Conducting biological surveys to determine anchoring, cable, and vessel locations that will avoid or minimize impacts to hard bottom substrate, eelgrass, and water quality.
- Using a dynamic-positioning vessel to minimize the need for anchoring and further reduce impacts to hard bottom substrate, eelgrass, and water quality, and developing an anchoring plan that will further reduce the risk to those resources.

- Immediately removing a portion of the failed cable to reduce the overall increase in project-related fill and committing to remove the remainder at the end of SYU production.
- Providing a marine mammal protection plan to avoid and minimize disturbance of marine mammals.
- Providing an oil spill prevention and response plan to minimize the risk of spills in coastal waters.
- Coordinating project activities with agencies and fishing interests to minimize disruption to commercial fishing.

To ensure the proposal conforms to Coastal Act policies, this staff report recommends a number of special conditions. **Special Condition 1** limits project work to that authorized by the Commission's decision. **Special Condition 2** indemnifies the Commission for damages that may occur due to this project, and **Special Condition 3** establishes that the Permittee would pay legal costs in association with this decision. **Special Condition 4** is meant to ensure the project receives all necessary permits before work begins. **Special Condition 5** requires Executive Director approval of the Permittee's marine mammal protection plan before work begins. **Special Condition 6** requires similar approval of measures to protect any endangered white abalone that may be in the project area. **Special Condition 7** requires Executive Director approval of the Permittee's anchoring plan before work begins. **Special Condition 8** is meant to ensure protection and adequate mitigation for eelgrass. **Special Condition 9** is meant to prevent the spread of the invasive plant Caulerpa taxifolia. **Special Condition 10** requires the project's oil spill response plan and refueling plan be approved by appropriate state and federal agencies. **Special Condition 11** requires additional spill prevention measures for part of the nearshore work. Finally, **Special Condition 12** requires Executive Director approval for work that may affect archaeological sites.

The Commission staff recommends approval of the proposed project, as conditioned. The Commission staff also recommends that the Commission concur with consistency certification CC-18-03 for the proposed project as conditioned.

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1.0 STAFF RECOMMENDATION

1.1 Approval with Conditions

The staff recommends conditional approval the project proposed in Coastal Development Permit Application No. E-01-032 consisting of the Santa Ynez Unit Offshore Power System Repair Project, as amended, and as described in the staff report dated March 27, 2003.

Motion:

I move that the Commission **approve** subject to the conditions set forth in the staff report dated March 27, 2003 the project proposed in Coastal Development Application No. E-01-032.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby **approves** Coastal Development Permit E-01-032 for the proposed project and adopts the findings set forth below on the grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or (2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

1.2 Concurrence in Consistency Certification

The staff recommends concurrence in Consistency Certification CC-18-03 for the project consisting of the Santa Ynez Unit Offshore Power System Repair Project, as amended, as described in the staff report dated March 27, 2003.

Motion:

I move that the Commission **concur** in Consistency Certification CC-18-03 that certifies that the proposed project is consistent with the enforceable policies of the California Coastal Management Program (CCMP).

Staff recommends a **YES** vote on the motion. Passage of this motion will result in concurrence in the certification and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution:

The Commission hereby **concurs** with Consistency Certification CC-18-03 for ExxonMobil Corporation and finds that the proposed project is consistent with the enforceable policies of the California Coastal Management Program (CCMP).

2.0 STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made before the expiration date.

3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

3.0 SPECIAL CONDITIONS

The permit is granted subject to the following special conditions:

1. **Scope of Project Approval:** This permit authorizes removal and installation of power cables as specifically described in the Permittee's August 19, 2002 coastal development permit application submittals (Offshore Power Supply Repair Project: Amended), except as otherwise modified by the conditions of this permit. Any modifications of or additions to the project shall require an amendment to this permit.

2. **Indemnification:** In addition to any immunities provided for by law, in exercising this permit, the Permittee agree to hold harmless and indemnify the Coastal Commission, its officers, employees, agents, successors and assigns from any claims, demands, costs, expenses and liabilities for any damage to public or private properties or personal injury that may result directly or indirectly from the project.

3. **Liability for Costs and Attorneys Fees:** The Permittee shall reimburse the Coastal Commission in full for all costs and attorneys fees --- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Coastal Commission may be required by a court to pay --- that the Coastal Commission incurs in

connection with the defense of any action brought against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit, the interpretation and/or enforcement of permit conditions, or any other matter related to this permit.

4. **Other Permits and Approvals:** Before starting construction, the Permittee shall provide to the Executive Director copies of all other local, state, and federal permits required to perform project-related work. These permits and approvals include:
   a. Regional Water Quality Control Board – Central Coast Region: final approved 401 water quality certification.
   b. State Parks: Temporary Use Permit, to be issued.
   c. San Luis Obispo Air Pollution Control District: "Authority to Construct" permit.
   d. U.S. Army Corps of Engineers: Nationwide Permits #3 and #12, pursuant to Rivers and Harbors Act Section 10 and Clean Water Act Section 404.
   e. U.S. Environmental Protection Agency: approval for clearing J-tubes on offshore platforms.

5. **Marine Mammal Protection Plan:** Before starting construction, the Permittee shall provide a marine mammal protection plan subject to review and approval by the Executive Director. Project-related construction shall not begin before the Executive Director approves the plan. The plan shall include mitigation measures including avoidance techniques, use of at least two NMFS-approved monitors during project activities, establishing marine mammal protection zones near the work areas, routing vessels away from marine mammals and known travel corridors, requiring regular reports of marine mammal sightings and any project-related incidents, and training project personnel on techniques to avoid harming or harassing marine mammals.

6. **Abalone Pre-construction Survey:** Before starting construction, the Permittee shall provide results of the marine biology pre-construction survey to the Executive Director. If the survey shows that white abalone (*Haliotis sorenseni*) are believed to be present, the Permittee shall not begin construction until providing evidence to the Executive Director that the California Department of Fish and Game or the National Marine Fisheries Service have approved measures to protect or relocate the abalone.

7. **Anchoring Plan**. Before starting construction, the Permittee shall provide an anchoring plan for review and approval by the Executive Director. This plan shall identify all areas of hard bottom substrate in the project area and shall include measures to avoid direct and indirect impacts to these areas.

8. **Eelgrass Survey and Mitigation:** The Permittee shall conduct pre- and post-project eelgrass surveys to determine whether eelgrass is damaged during project activities. The survey protocols shall be submitted to the Executive Director for review and approval, and shall, at a minimum, conform to the Southern California Eelgrass Mitigation Policy (Appendix B). The Permittee shall provide survey results to the Executive Director within 30 days of completing each survey.

If the Executive Director determines that less than 10 square meters of eelgrass was damaged during project activities, the Permittee shall submit for Executive Director review and approval a mitigation plan that conforms to the protocols of the Southern California Eelgrass Mitigation Policy. If the Executive Director determines that 10 square meters or more eelgrass area was damaged, the Permittee shall submit an application for permit amendment to determine mitigation requirements.

9. ***Caulerpa taxifolia* Pre-construction Survey:** No earlier than 90 days and no later than 30 days before starting project construction, the Permittee shall complete a survey of the nearshore portion of the project area in accordance to the protocols established in Section D of the *Caulerpa* Control Protocol established by the Southern California *Caulerpa* Task Force, dated November 22, 2002. Within five (5) business days of completing the survey, the Permittee shall submit the results for review and approval by the Executive Director and the Task Force's Surveillance Subcommittee (contact William Paznokas, California Department of Fish and Game, at 858-467-4218 or Robert Hoffman, National Marine Fisheries Service, at 562-980-4043).

   If *Caulerpa taxifolia* is found within the survey area, the Permittee shall not proceed with the project until (a) the Permittee provides evidence to the Executive Director that all *Caulerpa taxifolia* discovered within the survey area has been eliminated in a manner that complies with all applicable regulatory requirements, including the Coastal Act, or (b) the Permittee has revised the project to avoid any contact with *Caulerpa taxifolia*. No revisions to the project shall occur without a Coastal Commission-approved amendment to this coastal development permit, unless the Executive Director determines that an amendment is not required.

10. **Spill Prevention and Response Plan and Refueling Plan.** Before starting construction, the Permittee shall submit evidence to the Executive Director that the spill response plan required of the project's work vessels and approved by the U.S. Coast Guard has also been approved by the California Department of Fish and Game Office of Spill Prevention and Response, and that the refueling plan has been approved by the State Lands Commission.

11. **Operational Oil Spill Safety:** Work in the tunnel and conduit shall occur only with the pipelines shut in and the power cables de-energized unless the Permittee provides for Executive Director review and approval evidence showing that the work will be done safely with the pipelines and cables in operation.

12. **Archaeological and Paleontological Sites:** All work shall occur outside of a 300-foot buffer around known cultural resource sites unless otherwise approved by the Executive Director. In addition, if any unknown sites are detected during project operations, work that may affect those sites shall not occur unless approved by the Executive Director.

4.0 FINDINGS AND DECLARATIONS

4.1 Project Description and Background

ExxonMobil Corporation (hereinafter the Applicant) proposes to install a new 17-mile long power cable to replace a failed power cable running from its Las Flores Canyon onshore oil and gas processing facility to offshore Platform Heritage, and install a new five-mile long power cable between offshore Platforms Hondo and Harmony. The project also includes removing an approximately five-mile long portion of the failed cable during cable installation and deferring removal of the remainder of the failed cable until the end of oil and gas production at the platforms.

All facilities are in or adjacent to the Santa Barbara Channel (see Figure 1). The project is intended to restore and improve redundancy to the offshore electrical power system that supports the Applicant's Santa Ynez Unit (SYU) oil and gas production operations. The new cables include fiber optic components and will result in improved communications capability between the platforms and the onshore facility.

The SYU operations consist of 16 Outer Continental Shelf (OCS) leases located in the Santa Barbara Channel, offshore of El Capitan State Beach, and include three offshore platforms – Platform Heritage, located about 8 miles from shore; Platform Harmony, about 6 miles from shore; and Platform Hondo, located about 5 miles from shore (see Figure 2). The SYU also includes the Las Flores Canyon facility, located several miles inland, and about fifty miles of oil and gas pipelines and fifty miles of power cables running between the onshore facility and the platforms and between the platforms. These facilities currently produce about 54,000 barrels of oil per day and about 83 million cubic feet of gas per day. The proposed project would not change production levels from the facilities. The SYU facilities also include several pipelines and a length of cable remaining from the decommissioned Offshore Treatment and Storage (OS&T) Vessel, which are scheduled to be removed at the end of SYU operations.

Pipelines and power cables run underground from the Las Flores Canyon facility to a tunnel and conduit under Highway 101, a railroad, a bikepath, and El Capitan State Beach. The tunnel and conduit are about 1700 feet long and contain three 6-inch diameter power cables (Cables A, B, and C) and three pipelines (20-inch emulsion, 12-inch gas, and 12-inch water). The tunnel and conduit starts about 800 feet north of the shoreline and extends offshore about 800 feet offshore at a water depth of about 25 feet of water. From there, the pipelines and cables follow a corridor approximately 250' wide to a point about three miles offshore. At that point, the pipelines and cables diverge and run to the three offshore platforms. Water depth at the deepest point along the cable route is approximately 1350 feet.

In November 1999, Cable C, which provided power to Platform Heritage, failed. Electrical tests identified a fault in the cable approximately three miles from shore in about 245 feet of water. A video survey by a Remotely Operated Vehicle (ROV) showed no external damage to the cable. Further electrical testing performed by the Applicant to determine the cause of failure resulted in no conclusive determination; however, it is believed the fault was either due to insulation failure or damage that may have occurred during the initial cable installation. Electrical power to the three platforms is currently being provided by the two remaining power cables; however, if either of these cables were to fail, the remaining cable would not have the capacity to provide the level of electrical power needed to operate the platforms at their current rate of production.

Regulatory History: Exxon Corporation originally obtained the leases in 1968. Portions of the SYU development and facilities were originally permitted by the U.S. Geological Survey in 1974. In 1976, the California Coastal Zone Conservation Commission approved coastal development permit #216-75 for developing onshore facilities and temporary use of a marine terminal. In 1983, the Commission provided consistency concurrence for the portion of the project in federal waters (CC-7-83), and in 1985 provided consistency concurrence for onshore and nearshore portions of the project (CC-7-83R). In 1988, the Commission issued coastal development permit E-88-1 and consistency certification CC-64-87 for additional onshore and nearshore facilities, including the pipelines and power cables running from shore to the offshore platforms. This approval included a permit requirement that Exxon provide a restoration plan prior to abandonment of those facilities:

> *Condition #3: Prior to termination of the operation of any of these facilities authorized by this permit, Exxon shall apply for a coastal permit for the abandonment of the subject facilities. A permit application for facility abandonment shall include plans for site restoration.*

The failed power cable that is subject of the current proposed project is one of the facilities authorized by CDP E-88-1 and CC-64-87, and therefore requires ExxonMobil to submit a site restoration plan as part of a permit application in advance of abandonment. Because the power cable failure was unexpected, ExxonMobil did not apply in advance for abandonment and site restoration; however, this current proposed project is meant to respond in part to the requirements of Condition #3 above. The Applicant is complying with this requirement by removing that portion of the failed cable that lies within state waters, as well as a portion within federal waters, and has agreed to remove the remainder of the cable within federal waters at the end of production at SYU, subject to Commission approval.

Project jurisdiction: The onshore portion of the project is within the LCP jurisdiction of Santa Barbara County, and includes the Las Flores Canyon processing facility, and the shoreward part of the tunnel. Project-related work in this area includes staging equipment, removing a portion of the failed cable, and installing a new cable. The portions of the project in coastal waters are within the Commission's retained coastal development permit jurisdiction or in federal waters subject to the Commission's review of federal consistency (see Section 4.2 below).

Project Design and Construction:

The primary components of the project include:

- Removing an approximately 5-mile long portion of failed Cable C along with sections of the cable onshore and at Platform Heritage;
- Installing electrical and communication equipment on the three platforms to allow operation of new power cables and communications equipment;
- Replacing the failed shore-to-platform power cable with a new cable, Cable C-1;

- Installing a new platform-to-platform power cable, Cable D-1, between Platforms Hondo and Harmony through existing J-tubes on the platforms; and,

- Removing the remainder of failed Cable C at end of SYU production.

To design the project to avoid or minimize impacts to coastal resources, the Applicant performed a number of tests and surveys to determine the cause and location of the cable failure, to determine characteristics of existing and proposed cable routes, and to determine marine biological resources in the cable area. Surveys were done using divers in the shallower areas of the project and ROV video and side scan sonar for the deeper water portions of the project.

Surveys included:

- ROV video inspection of the failed cable: to determine location and reason for cable failure, and to review marine growth on the cable.

- ROV video inspection of J-tubes on the platforms that would be used for cable installation and at cable crossover points.

- Side scan sonar survey of the proposed cable routes from shore to Platform Heritage and between Platforms Hondo and Harmony.

- Two marine biology dive surveys at and near the conduit end and potential anchor locations.

Additionally, to determine how best to minimize the amount of fill in coastal waters resulting from the project, the Applicant performed a number of analyses to evaluate several alternatives for removing the failed cable. Because much of the length of the failed cable is adjacent to other active cables and pipelines, the Applicant expressed concern that removing it would create the risk of damage if the cable were accidentally dropped during removal. To address this potential, the Applicant performed several analyses to determine what could happen if the cable was dropped at various locations and water depths along the route. These analyses showed that although the likelihood for dropping the cable was low, the risk of damage to nearby structures increased as water depth increased (i.e., the further the cable dropped through the water column, the greater force it would impart to any structures on the seafloor). Based on these analyses, the proposed project calls for immediately removing a five-mile portion of cable from shore to about 400' water depth and deferring removal of the remainder of the cable in deeper under the end of oil and gas production at SYU.

To address similar concerns, the route of the proposed replacement Cable C-1 runs within the same corridor as the existing cable to about three miles offshore and to similar water depths, but then is routed to the south, away from other existing pipelines and cables. This route was selected to minimize risk of damage to the other active pipelines and cables within the corridor area if the new cable were to be accidentally dropped during installation. It also avoids the areas near buoy anchors placed to support operations at Platforms Hondo and Harmony, and thus avoids interference or damage that might occur during activities at those anchor areas.

New Cable D-1 would be located in a corridor between Platforms Hondo and Harmony containing another power cable (Cable E, running between Platforms Harmony and Heritage), two oil emulsion pipelines running between Platforms Harmony and Heritage and between Platform Harmony and shore, and a water pipeline running between Platform Harmony and shore. This new cable will include a protective covering where it crosses pipelines or power cables to provide separation and protection.

Project Construction: Project construction would be completed in several phases:

- Phase 1: involves removing portions of the failed cable from the tunnel, conduit, and platform J-tubes, and removing the section of cable from shore to about five miles out, to a depth of about 400 feet. Before cutting the cable, divers using a water jet would jet away sediments near the conduit terminus, and material would be removed from the platform J-tubes. Cable pulling and rigging equipment would be installed onshore and on the platforms. When the cable is cut, the seaward ends would be placed back onto the seafloor, and 8-foot by 8-foot concrete mats would be placed over the cable ends to ensure they do not move. The sections of removed cable are to be disposed of an appropriate land-based disposal facility.

- Phase 2: involves installing electrical and communications equipment on the platforms to allow for the operation of the new cable and new fiber optics communication system. This work consists of relatively minor additions to equipment already on the platforms, and most would be placed in electrical cabinets or attached to other existing equipment.

- Phase 3: involves installing the new cables – Cable C-1 running between shore and Platform Heritage, and Cable D-1 running from Platform Hondo to Harmony. At the several locations where the cable will cross over existing pipelines or other cables, the project includes placing concrete mats or protective coverings to prevent damage.

- Phase 4: involves testing the cables, making final connections, and energizing the cables.

The work under all four phases is expected to take four to eight weeks, depending in part on vessel availability and weather conditions. Cable removal and installation is expected to take two to three weeks. The Applicant has committed to remove the remainder of the failed cable at the end of production from the SYU unit. This is expected to occur sometime between 2020 and 2030, and will require additional review by the Commission at that time.

The proposed project will involve the use of four to five vessels, including a dynamic positioning (DP) cable-laying vessel, a supporting tug, a dive vessel, and one or two supply/work vessels. One or two support skiffs would also be used as necessary during the project. To remove and lay cables, the Applicant anticipates using the *Giulio Verne*, an 420-foot long DP vessel. Use of a DP vessel allows much of the work to be done without the need for anchors, which will allow impacts to the seafloor to be minimized. Anchoring will be necessary in the shallow water portion of the project.

4.2 The Coastal Commission's Permit and Federal Consistency Jurisdiction

The Coastal Commission has original coastal permit jurisdiction over project areas on public trust lands, tidelands, and submerged lands from the mean high tide line to three nautical miles offshore. The portion of the project that involves the burial of cable within State waters (*i.e.*, seaward of the mean high tide line to three nautical miles offshore) requires issuance of a permit from the Coastal Commission.

The project also requires permit approval from the United States Army Corps of Engineers (ACOE) and therefore requires a consistency certification pursuant to Section 307(c)(3)(A) of the Coastal Zone Management Act. For the portion of the project that lies in State waters or on state lands, the consistency certification is redundant; the coastal development permit serves as a consistency certification. For the portion of the project that lies outside the coastal zone in federal waters, the Applicants submitted a consistency certification to the Coastal Commission on March 6, 2003, which states that the proposed project conforms to enforceable policies of California's coastal management program and incorporates by reference the mitigation measures described in the project MND/EA that allow the the project to conform.

This staff report is a combined coastal development permit and consistency certification.

4.3 Related Approvals

County of Santa Barbara: The County of Santa Barbara has coastal development permit (CDP) jurisdiction for the onshore portions of the project site. The County served as the lead agency for compliance with requirements of the California Environmental Quality Act (CEQA). On February 19, 2003, the County conditionally approved Coastal Development Permit No. 87-DP-032 RV06.

California State Lands Commission (SLC): The State Lands Commission has jurisdiction over lands underlying state waters and requires a lease for the use of those lands. The SLC first issued a lease for the use of state lands associated with the SYU development on February 1, 1988. On February 21, 2003**,** the SLC certified the mitigated negative declaration (MND) for the project pursuant to the California Environmental Quality Act (CEQA), and approved an amendment to the original lease allowing installation of the new power cable and removal of the failed cable.

California State Parks: The onshore and nearshore portions of the project will require a Temporary Use Permit from the California State Parks Department.

Regional Water Quality Control Board – Central Coast Region (RWQCB): The RWQCB regulates waste discharges into receiving waters in the project area. On February 5, 2003, the Applicant submitted an application for a Section 401 water quality certification. The project will be subject to issuance of a final water quality certification from the RWQCB.

Santa Barbara County Air Pollution Control District (APCD): The APCD is the local air district responsible for implementing federal and State air quality standards in the project area. The Applicant is required to obtain an "Authority to Construct" permit from APCD for removing the 5-mile long portion of the failed cable.

U.S. Army Corps of Engineers (Corps): The Corps has regulatory authority over the proposed project under Section 10 of the Rivers and Harbors Act of 1899 (*33 U.S.C. 1344*) and Section 404 of the Clean Water Act (CWA) (*33 U.S.C. 1344*). Section 10 of the Rivers and Harbors Act regulates the diking, filling and placement of structures in navigable waterways. Section 404 of the Clean Water Act regulates disposal of dredge and fill materials into waters of the United States. The dredging of sediment for a utility line is regulated under the Rivers and Harbors Act, and the placement of cable is regulated under the Clean Water Act. The Applicant applied most recently for the necessary Corps permit on February 5, 2003. The Corps is processing the request as a Nationwide Permit #3 (Maintenance Activities) in state waters, and a Nationwide Permit #12 (Utility Line Activities) in federal OCS waters.

Pursuant to Section 307(c)(3)(A) of the Coastal Zone Management Act, any Applicant for a federal permit to conduct an activity affecting any land or water use or natural resource in the coastal zone must obtain the Coastal Commission's concurrence in a certification to the permitting agency that the project will be conducted consistent with California's approved coastal management program. As discussed above in Section 4.2 of this report, the Applicants submitted a consistency certification on March 6, 2003 stating that the proposed project conforms to the state's coastal management program.

U.S. Environmental Protection Agency (EPA): The U.S. EPA has jurisdiction over water quality concerns in the OCS. For this proposed project, the Applicant is required to obtain EPA approval for clearing the J-tubes on the offshore platforms to prepare them for installing the new power cable.

U.S. Minerals Management Service (MMS): The MMS served as the lead agency in reviewing the proposed project for compliance with requirements of the National Environmental Policy Act (NEPA) and prepared a joint Mitigated Negative Declaration/ Environmental Assessment (MND/EA) with the County of Santa Barbara. On February 19, 2003, the MMS issued a Finding of No Significant Impact and determined that the proposed project as amended was consistent with MMS regulations. The MMS also determined that the project would not require a revision to the Applicant's existing SYU Development and Production Plan (DPP), as it considered the work to be a repair and maintenance project.

4.4 Coastal Act Issues

4.4.1 Dredging and Placement of Fill in Coastal Waters

Coastal Act Section 30108.2 states:

> *"Fill" means earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.*

Coastal Act Section 30233(a) states in part:

> *The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division where there is no feasible less environmentally damaging alternative,*

and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged depths on existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

The proposed project includes fill in the form of power cables, concrete mats, and protective covers around portions of the cables. The new cables are approximately six inches in diameter; therefore placing 17 miles of the cable from nearshore to Platform Heritage will result in about 1.03 acres of fill. The approximately five-mile length of new Cable D-1 to be suspended between Platforms Hondo and Harmony will result in an additional 0.3 acres of fill. The total amount of new fill will be offset to some degree by the initial removal of the five-mile length of Cable C, which is also approximately six inches in diameter, and which represents about 0.3 acres of fill. Therefore, the overall total increase in fill due to the cables would be 1.03 acres (1.03 acres + 0.3 acres – 0.3 acres = 1.03 acres). The two concrete mats to be placed over the cut ends of the failed cable are each about eight feet by eight feet, for a total of 128 additional square feet of fill.

Coastal Act Section 30233(a) allows the Coastal Commission to authorize a project that includes fill or dredging in open coastal water if it meets three tests. The first test requires that the proposed activity must be one of eight types of use described in Coastal Act Section 30233(a)(1)-(8). The second test requires that there be no feasible less environmentally damaging alternative.

The third test mandates that feasible mitigation measures be provided to minimize the project's adverse environmental effects.

1) Allowable Use Test: Coastal Act Section 30233(a)(1) allows fill in support of coastal-dependent industrial facilities. Section 30101 of the Coastal Act defines "coastal-dependent development" as development requiring "…a site on, or adjacent to the sea to be able to function at all." The offshore oil platforms in this case are coastal-dependent, and the placement of cables and the associated protective devices to serve these platforms is likewise coastal-dependent. The Commission thus finds that the fill required for the proposed project meets the allowable use test of Coastal Act Section 30233(a).

2) No Feasible, Less Environmentally Damaging Alternatives: The second test of Section 30233(a) requires an assessment of whether there are feasible, less environmentally damaging alternatives to placing fill in coastal waters. The MND/EA evaluated several project alternatives that would have eliminated or reduced the amount of fill. Alternatives evaluated included:

   - Provide power on the platforms rather than from shore: This alternative evaluated placing diesel- or gas-powered generators on the platforms. While this alternative would have resulted in no additional fill in coastal waters, it was considered infeasible because the size of the 20 megawatt generators necessary to operate each platform exceeded the space available on the platform. Additionally, constructing these generators would have taken several years, and operating the generators would have resulted in significant increases in air pollutants from the platforms.

   - Cable splicing: This alternative involved repairing the cable by splicing several hundred feet of new cable to either side of the fault location. It was considered infeasible for at least two reasons: first, the existing cable did not have internal water blocking devices to prevent water from entering and moving along inside the cable; and second, lifting and cutting the cable to add a splice and then replacing the cable on the seafloor would have subjected it to stresses that would have increased the potential for further damage.

   - Near-term removal of the entire length of failed Cable C: The project as proposed will result in an increase in fill of about 1.03 acres. Near-term removal of the entire length of failed Cable C, either as part of the initial cable installation or within the next four or five years, would result in an overall total increase in fill of about 0.3 acres. However, as described above in Section 4.1, the Applicant's risk assessment showed that removing the full length of the failed cable during SYU production would increase the risk of damage to other nearby SYU facilities, which could result in additional or significant environmental impacts. Therefore, while the project as proposed results in a greater amount of coastal fill, it also results in less overall environmental risk. Removing the remaining section of Cable C during the next four to five years is not considered a less environmentally damaging alternative, since there would be no decrease in risk, but would be increased

impacts due to re-staging the necessary equipment and additional air emissions. Additionally, the increased fill of the proposed project is not expected to have significant impacts, as the route for the new cable was selected in part to minimize adverse environmental effects.

- Locating the new cable within the same footprint as the existing failed cable: The project as proposed includes routing the OCS portion of the cable further south than the existing cable location, thus adding to the length and amount of fill. While locating the new cable in the same footprint as the existing cable would have eliminated this increase in fill, this alternative was considered as having the potential to cause greater environmental damage due to the increased risks of spill or damage as described above.

- No project: This alternative would not achieve the project purpose of restoring redundant electrical power to the offshore platforms.

While some of the alternatives considered would have resulted in less fill, they were determined to not be less environmentally damaging; therefore, the Commission finds that the second test of Coastal Act Section 30233(a) has been met.

3) Feasible Mitigation Measures: The third test of Section 30233 allows filling of coastal waters if feasible mitigation measures have been provided to minimize any adverse environmental effects. Other sections of this report describe mitigation measures taken to avoid or minimize adverse effects to marine biological resources, water quality, and other coastal resources, and many of these measures will also minimize any adverse environmental effects of placing fill. The proposed project as described in the MND/EA includes measures to avoid or minimize impacts to marine biological resources and water quality that will also reduce the adverse effects of placing fill in coastal waters. Additionally, the Applicant has committed in the consistency certification to a number of conditions that will likewise reduce the impacts of fill to coastal waters.

With the inclusion of mitigation measures and conditions described elsewhere in this report, the Commission finds that the project includes feasible mitigation measures and therefore meets the third test of Coastal Act Section 30233(a).

4.4.2 Marine Resources and Water Quality

Coastal Act Section 30230 states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Coastal Act Section 30231 states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

The proposed project could result in several types of adverse impacts to marine biological resources, including: (1) marine mammal entanglement in exposed cable on the seafloor; (2) marine mammal collision or entanglement during installation; (3) vessel noise impacts on marine mammals; (4) disturbance to the endangered white abalone (*Haliotis soensoni*) due to nearshore project operations; and, (5) disturbance of benthic biota and eelgrass during nearshore cable installation or repair. Additionally, some of the project will take place in Essential Fish Habitat and has the potential to adversely affect fish habitat characteristics. The project will also result in turbidity-related impacts to water quality.

4.4.2.1 Marine Biological Resources

The project site provides habitat for a wide variety of species, including a number of special status species and those important to commercial and recreational fishing interests. Work on the project will occur in habitat types ranging from upland sites under the CDP jurisdiction of Santa Barbara County to nearshore and shallow water habitats off El Capitan State Beach to deep water habitats up to 1350 feet deep and several miles offshore in OCS waters.

Endangered, Threatened, and Sensitive Marine Species:

Marine mammals: Numerous studies have identified at least thirty-four species of marine mammals that live in or migrate through California waters. The project area serves as habitat for a variety of these marine mammals. The most common include several whale species – the California gray whale (*Eschrichtius robustus*), the blue whale (*Balaenoptera musculus*), humpback whale (*Megaptera novaeangliae*), sperm whale (*Physeter macroephalus*), and Minke whales (*Balaenoptera acutorostrata*); toothed whales – common dolphins (*Delphinus capensis* and *D. delphis*), Dall's porpoise (*Phocoenoides dalli*), and others; two pinneped species – California sea lions (*Zalophus californianus*) and harbor seals (*Phoca vitulina*); and Southern sea otters (*Enhydra lutris nereis*). All marine mammals are protected by the federal Marine Mammal

Protection Act (MMPA), which prohibits the intentional taking[1] of any marine mammal without a permit. Additionally, several of the marine mammal species found in the project area are protected by the federal Endangered Species Act (ESA), including the humpback whale, blue whale, sperm whale, which are listed as endangered.

Potential project-related impacts to marine mammals include disturbance due to construction-related noise, entanglement or collision with vessels during cable laying or removal, and entanglement from suspended sections of cable after cable-laying is completed.

- Noise: Noise-related impacts would be due to activities of the four or five vessels involved in the project over a four-to eight week period. The change from existing conditions is expected to be minor, as there are currently regular and ongoing vessel activities in the project area, including supply and crew vessels that operate several times a day. Marine mammals that live in the area are believed to be relatively tolerant of vessels, although both individuals native to the areas as well as individuals migrating through the area are likely to alter their course or change their swimming speed in response to noise or proximity of vessels.

- Cable-laying and removal: The cable-laying and removal activities increase the potential for marine mammals to either collide with a project-related vessel or interact with the cables being placed or removed.

- Post-construction entanglement: Whales that feed or move on or near the seafloor could be entangled in sections of cable suspended above the seafloor.

Because marine mammals are protected under the MMPA and some are protected under the ESA, any adverse effect or "take" may be considered significant. The Applicant incorporated several mitigation measures into the project to further reduce the low potential for adverse impacts to marine mammals, including:

- Scheduling the project to occur outside of the gray whale migration season (December to June each year).
- Using vessels that are relatively slow-moving and represent little increased risk of collision with marine mammals.
- Routing the cables through soft bottom habitat and avoiding areas of hard bottom habitat to avoid creating areas where the cables could be suspended above the seafloor due to abrupt elevation changes.
- Implementing a marine mammal protection plan to be approved by several agencies. The plan will include a number of mitigation measures, including having at least two NMFS-approved monitors available during cable laying activities, establishing marine mammal protection zones near the work areas, requiring regular reports of marine mammal sightings and any project-related incidents, training project personnel on techniques to avoid harming or harassing marine mammals, and others.

[1] The definition of "take" under the Act includes intentional or unintentional harassment, any act that could cause injury or death, and any action that changes the behavior of the animal.

To further ensure marine mammals are protected in conformity to Coastal Act policies, **Special Condition 5** requires the Applicant to submit prior to construction a marine mammal protection plan for the Executive Director's review and approval.

White abalone (*Haliotis sorenseni*): During a pre-construction biological survey in August 2001, the Applicant found what was believed to be a white abalone on armor rock about 50 feet from the end of the nearshore cable conduit at about 20 feet of water depth. The white abalone is a federally-listed endangered species with a historic range from approximately Point Conception on the north to Baja California in the south

The white abalone is generally found in much deeper waters (80 to 200'); however, this individual was found in about 20 feet of water about 50 feet from where excavation work is proposed to allow cable removal and placement through the conduit terminus. The excavation work would result in turbidity, which would be short-term but could adversely affect the abalone. Additionally, cable removal and placement, along with vessel anchoring in the vicinity, could result in abalone being crushed or being disturbed by any increased turbidity.

In April 2002, the Applicant performed an expanded survey to determine if there were other abalone in the area that could be adversely affected by the proposed work. The survey covered an area about 825' by 800' centered on the conduit terminus. The survey found 21 additional abalone in the area, one of which was thought to be a white abalone about 600 feet from the excavation area. The survey also found the shell of the white abalone identified in the August 2001 survey. The surveyors also observed a sea otter near the site and was believed the sea otter had eaten the abalone during the period between the two surveys.

To ensure the project does not adversely affect white abalone, the Applicant will conduct a pre-installation survey within 14 days of any work to be done in the area of the conduit terminus. If any white abalone are found within 75 feet of the conduit terminus, work will not begin until CDFG or NMFS relocates the individuals or collects them pursuant to a Scientific Enhancement Permit. To further avoid impacts to abalone, the Applicant will position all vessel anchors during project construction at least 40 feet from rock habitat, and anchors will be lowered and retrieved vertically to avoid dragging them across rocky habitat areas.

To ensure the measures intended to protect abalone conform to Coastal Act policies, **Special Condition 6** further requires the Applicant to submit results of the pre-construction survey for the presence of abalone to the Executive Director, and further requires that the Applicant provide evidence of CDFG or NMFS approval to continue work should the survey determine that abalone are present.

Additionally, the NMFS reviewed the proposed project for potential impacts to marine mammals and the white abalone, and made recommendations that the Applicant has incorporated into the project description. Many of the mitigation measures and conditions described elsewhere in this report will result in further avoidance and minimization of potential adverse effects on essential fish habitat.

Hard Bottom Habitat: The project will disturb areas of the seafloor and has the potential to disturb sensitive hard bottom habitat areas as well as eelgrass habitat. The project area includes both soft and hard bottom substrates. Hard bottom habitat is considered higher value habitat for several reasons: (1) it is not as common as soft bottom habitat; (2) it supports a diverse assemblage of epifaunal (organisms that live on the substrate) invertebrates; and (3) it serves as a nursery, food source, and shelter for numerous species of fish. It is also more sensitive to disturbance than soft bottom areas, and does not recover as quickly from mechanical disturbance or increased sediment loads. Soft bottom habitat also supports a wide variety of epifaunal and infaunal (organisms that live in the substrate) species; however, these species are generally more tolerant of environmental changes and recover quickly in areas of disturbed soft bottom habitat. Even so, many infaunal species have limited mobility and individuals are not likely to evade disturbance to the area.

Past surveys of the area have shown that the existing cables, which are located almost entirely on soft bottom habitat, have had minimal effect on benthic habitats in the SYU project area. A 1992 report on post-construction conditions (Post-Construction Marine Biological Survey and Comparison of Pre- and Post-Construction Survey Data – Santa Ynez Unit. Offshore Pipelines and Power Cables Installation, July 24, 1992) stated that there were some differences between pre- and post-construction habitat boundaries in shallow waters (less than thirty-five feet deep), but that these were likely caused by natural seasonal changes in the area, and not caused by placement of pipelines or power cables.

The project has been designed to avoid and minimize impacts to hard bottom substrates. As part of project design, the Applicant surveyed the existing and proposed cable routes to identify areas of soft and hard bottom. The route selected avoids most hard bottom areas by at least 50 feet, but will cross one area of hard bottom habitat that is unavoidable. This area is a linear rock feature about 1600 feet long that lays perpendicular to the cable route just over four miles from shore at about 275 feet water depth. At the point of the cable crossing, the rock is about 25 feet wide, so the total contact area of the 6-inch diameter cable would be about 12.5 square feet. The failed power cable also crosses this rock feature, and an ROV survey done in 2002 showed that the rock in the area of the failed cable did not appear to be crushed or scoured and the failed cable had apparently not moved since it was originally placed. This area of the failed cable is part of the section proposed to be removed as part of the current work. Based on the small amount of surface area that would be affected, the effects to marine biology of placing the new cable across this rock feature are expected to be minimal.

The project includes a number of additional mitigation measures to avoid or minimize impacts to hard bottom habitat, including:

- Pre-and post-construction marine biological surveys to identify impacts that may be caused by cable removal and installation or by vessel anchoring.
- Use of a dynamic-positioning vessel to minimize the need for anchoring.

- Surveys to identify areas of hard bottom habitat to avoid during anchoring, and the use of anchoring techniques, such as lowering and raising anchors vertically, that limit impacts to the seafloor.
- Use of ROVs to monitor cable installation activities so that the route may be altered to avoid hard bottom habitat areas if necessary.

To further ensure the project conforms to Coastal Act policies, **Special Condition 7** requires the Applicant to submit for Executive Director review and approval an anchoring plan showing that hard bottom substrate areas are avoided.

Eelgrass: The nearshore area near the conduit entrance includes eelgrass (*Zostera marina*), which is considered important habitat for a number of marine organisms. The project could adversely affect eelgrass due to turbidity impacts or due to vessel anchoring. The proposed anchoring plan for work in this area is intended to avoid impacts to both hard bottom habitat and eelgrass habitat, but shows that roughly 12 to 24 eelgrass plants could be crushed or otherwise adversely affected by anchor placement. If impacts to eelgrass occur, the Applicant will adhere to mitigation measures prescribed in the Southern California Eelgrass Mitigation Policy (see Appendix B), which will result in restoration as appropriate. This policy establishes survey protocols, mitigation ratios, planting techniques, monitoring requirements, and other measures for acceptable eelgrass mitigation work. The Applicant will also conduct pre- and post-project surveys to determine the actual impacts.

To ensure eelgrass is protected in conformity to Coastal Act policies, **Special Condition 8** requires the Applicant to submit pre- and post-construction surveys to the Executive Director to determine whether eelgrass is damaged during the project. The surveys are to be done using the protocols established in the Southern California Eelgrass Mitigation Policy (see Appendix B). This Policy includes specific protocols for surveys, mitigation sites, ratios, techniques, monitoring, and success. If eelgrass impacts cover less than 10 square meters (which is the lowest threshold in the Policy), **Special Condition 8** further requires the Applicant to use those protocols to develop a mitigation plan subject to Executive Director review and approval. If the project's impacts to eelgrass cover greater than 10 square meters, **Special Condition 8** requires the Applicant to submit an application for permit amendment to determine what mitigation is necessary.

Invasive Species – *Caulerpa taxifolia*: *Caulerpa taxifolia*, an invasive plant species, has been found in at least two locations along the California coast, and has the potential to live and thrive in many more coastal locations. *Caulerpa* is a fast growing plant that creates a dense vegetative mat that can smother or crowd out native fish, invertebrate, and vegetative species used by other species as food or habitat. Its habitat requirements are not yet fully known, but it has the potential to become established in shallow waters along much of California's coast.

To address the threat posed by *Caulerpa*, the Southern California *Caulerpa* Task Force was established to provide quick and effective responses to prevent or control *Caulerpa* in coastal waters. The Task Force includes representatives from state, federal, local, and private entities.

The Task Force developed protocols (see Appendix C) to be used when work in coastal waters could result in discovery, introduction, or dispersal of *Caulerpa*. **Special Condition 9** requires the Applicant to conform to those protocols, including conducting a pre-construction survey in the nearshore waters of the project site, and notifying the Task Force if *Caulerpa* is found.

Essential Fish Habitat: Most of the project is within areas considered Essential Fish Habitat pursuant to the federal Magnuson Fishery Conservation and Management Act and the Sustainable Fisheries Act. Nearshore portions of the project serve as habitat for at least 17 fish species managed by the Pacific Fishery Management Council, and the offshore areas of the project include habitat for several dozen additional fish species.

NMFS reviewed the proposed project for potential impacts to Essential Fish Habitat, and made recommendations that the Applicant has incorporated into the project description. Additionally, many of the mitigation measures and conditions described elsewhere in this report will result in avoidance and minimization of potential adverse effects on essential fish habitat.

4.4.2.2 Marine Water Quality Impacts

The proposed project's principal impact on marine water quality will be increased turbidity during several phases of the project, including cable removal and laying, vessel anchoring, jetting sediments away from the conduit terminus, and flushing and pigging J-tubes on the platforms. Additionally, any marine organisms living on the substrate provided by the hard surface of the cable will be lost when portions of the cable are removed.

Cable removal and installation: Based on ROV video surveys, it appears that about half of the 17-mile length of the failed cable is buried and half is exposed at the seafloor surface. The cable was not originally buried, and the portions that are now buried were covered due to natural sedimentation over the past approximately twenty years. The first two miles of cable closest to shore are completely buried to a depth of several inches, and the next three miles are somewhat embedded in the seafloor. Removal of the five-mile nearshore portion of the failed cable will result in turbidity impacts in the area of the conduit terminus and along the entire length of the removed section.

The project will require jetting away several dozen cubic yards of sediment in the area of the conduit terminus to allow removal and installation of the cables through the conduit and tunnel. To minimize turbidity from this operation, sediment will be directed through a hose to a nearby low area away from armor rock, hard bottom habitat or other similar features. Over the five-mile length of cable to be removed, it is expected that a total of 120 cubic yards of sediment will be disturbed, although the turbidity effects are likely to be relatively minor and short-term. Additionally, as the failed cable is pulled aboard the vessel, a water jet will be directed at it to remove adhering sediment and marine organisms to allow the cable to be rolled onto a reel for disposal. This will result in short-term and minor turbidity at the water surface, which will likely disperse quickly due to currents and wave action.

During cable-laying operations, there will again be relatively minor and short-term impacts as the cable is positioned on the seafloor. Impacts are likely to vary somewhat by water depth and distance from shore. The nearshore areas of the cable route are generally sandy and the deeper

areas contain more silt, so turbidity will be greater in the deeper water; however, all turbidity-related impacts are expected to be minor and short-term.

Anchoring: Anchoring the project-related vessels will result in minor turbidity increases. To minimize impacts related to anchoring, the Applicant will implement a number of measures, including using a DP vessel, which requires anchoring only in the nearshore shallow-water areas. Other measures include both the DP vessel and other project vessels to adhere to provisions of an anchoring plan, including measures that minimize turbidity during lowering and raising anchors. To further ensure the anchoring plan conforms to Coastal Act policies, **Special Condition 7** requires the Applicant before starting construction to submit an anchoring plan for Executive Director review and approval.

Clearing the conduit terminus: There will be some localized turbidity impacts due to jetting sediments away from the conduit terminus located about 800 feet offshore to allow access for cable removal and installation. This will involve using water jets to expose the end of the conduit, which is buried to a depth of several feet. The amount of sediment to be removed is expected to be from 30 to 60 cubic yards. The sediment in this area is primarily sand-sized particles and are expected to settle out of the water column quickly. The sediment will be directed to a shallow hummock near the conduit terminus, which will further minimize its drift.

Flushing and pigging J-tubes: The internal surfaces of the J-tubes have built up a layer of sediment, marine organisms, and some rust that will be removed before the cables are pulled through. The total amount is expected to be about 1 cubic yard of material and will be dispersed quickly in the water column.

Conclusion:

Based on the reasons above, the Commission finds that, as conditioned, the proposed project will be carried out in a manner that maintains marine resources and sustains the biological productivity and quality of coastal waters and is therefore consistent with Coastal Act Sections 30230 and 30231.

4.4.3 Oil Spills

Coastal Act Section 30232 states:

> *Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

Section 30232 requires an applicant to undertake measures to prevent an oil spill from occurring, and requires effective containment and cleanup measures should a spill occur. There are two primary ways the proposed project could result in an oil spill – from vessels used during project construction or from damage to pipelines near the project work areas.

Vessels: The project will involve the use of four to six vessels and skiffs, any of which have the potential to spill oil or fuel. Use of vessels for the project also results in the potential for collision, either among the work vessels or with nearby fishing, recreational, or other vessels in the project area. However, the likelihood of a spill occurring is very low.

Even so, the proposed project includes a number of measures meant to further reduce the risk of spills from vessels, including:

- The SYU facilities are required to maintain an Oil Spill Response Plan as part of their ongoing operations, pursuant to several local, state, and federal regulations. This plan includes measures to prevent spills as well as specific requirements for equipment, training, and procedures to be followed in the event of a spill. This proposed project will be subject to provisions of this plan, which was most recently approved by the MMS in the fall of 2002.

- The Applicant and Clean Seas are the primary responders to spills at SYU, and both entities maintain response equipment as required by the spill response plan.

- The Applicant will prepare a refueling plan to minimize the potential for fuel spills at sea.

- Prior to construction, the Applicant will conduct a boom deployment drill for contractors responsible for deployment.

- The vessels used for project work will also be required to maintain appropriate spill response capabilities, pursuant to state and federal regulations, and will have coordinated communication capability to help prevent collisions.

- The Applicant will provide information about the vessel locations and work schedules to the U.S. Coast Guard for inclusion in a Notice to Mariners so other vessels operating in the area will be able to avoid the project area during construction.

Additionally, under the Submarine Cable Act (47 USC 21), fishing vessels and other ships must keep their equipment or vessels at the distance of one nautical mile from a vessel engaged in laying or repairing cable or at least a quarter nautical mile from buoys intended to mark the position of a cable when being laid.

To ensure the project conforms to Coastal Act policies, **Special Condition 10** requires the Applicant to provide evidence to the Executive Director that the spill response plan and the refueling plan have been approved by the Office of Spill Prevention and Response and by the State Lands Commission before starting work.

Pipelines: Project work will also occur near pipelines – the failed Cable C is located adjacent to several active pipelines (emulsion, water, and gas) and crosses over a POPCO gas pipeline about a quarter-mile offshore. New Cable D-1 is routed between Platforms Hondo and Harmony in a corridor containing two oil emulsion pipelines and a water pipeline. These pipelines could be damaged if a cable or anchor is dropped on them during project operations.

The Applicant has included a number of measures to avoid or minimize possible damage to pipelines in the project area. In addition to the measures meant to prevent spills from vessels, many of which will also reduce the risk of pipeline damage, the Applicant has included the following, many of which are the same or similar to those cited above regarding vessels:

- The SYU facilities are required to maintain an Oil Spill Response Plan as part of their ongoing operations, pursuant to several local, state, and federal regulations. This plan includes measures to prevent spills as well as specific requirements for equipment, training, and procedures to be followed in the event of a spill. This proposed project will be subject to provisions of this plan, which was most recently approved by the MMS in the fall of 2002.

- The Applicant and Clean Seas are the primary responders to spills at SYU, and both entities maintain response equipment as required by the spill response plan.

- The Applicant will prepare an anchoring plan that includes detailed maps of anchoring sites and pipeline locations, along with navigation equipment that will be used to set and remove anchors to reduce the risk of pipeline damage. Additionally, the Applicant will be using a dynamic-positioning vessel for the cable removal and placement, which will require anchoring only in the nearshore area.

- Materials related to cable removal and placement will be loaded at port and crane lifts will not be made over pipelines and cables at sea.

- The Applicant performed several engineering analyses and risk assessments to determine the potential for damage due to a cable being dropped during removal or installation. The analyses determined that the risk of both occurrence and damage was quite low, but that the risk increased with increased water depth (i.e., greater than 400 feet). The proposed project includes deferred removal of the failed cable in depths greater than 400 feet, in part due to the increased risk of removal near active pipelines, and also includes routing the new cable in deeper waters at a safe distance from the pipelines. Additionally, the Applicant will prepare a Cable Release Prevention Plan that will detail the engineering and safety measures to be taken to prevent accidental release.

- Where the cables will cross pipelines or other cables, protective concrete “mattresses” and protective polymer sheaths around the cable will be used to provide additional stabilization and support.

- The Applicant will shut-in the pipelines and de-energize the cables during work in the tunnel and conduit, unless it can be clearly demonstrated that the cable pulling operations can be performed safely during this work.

To ensure the project conforms to Coastal Act policies, **Special Condition 7** requires the Applicant submit the anchoring plan for the Executive Director’s review and approval, **Special**

Condition 10 requires the Applicant to submit evidence that the project's spill plan has been approved by the Office of Spill Prevention and Response, and **Special Condition 11** requires Executive Director approval for any proposal by the Applicant to continue pipeline and cable operations during cable removal and placement in the conduit and tunnel.

Conclusion:

Based on the mitigation measures and conditions included in the project, the Commission finds the project will protect against spillage of oil and other hazardous substances and will be consistent with the requirements of Coastal Act Section 30232.

4.4.4 Commercial and Recreational Fishing

Coastal Act Section 30234.5 states:

> *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

The SYU project area supports a wide variety of fish and shellfish important to commercial and recreational fishing interests. The project area is within two California Department of Fish & Game (CDFG) Fish Blocks, which are areas of approximately 82 square miles designated by CDFG for keeping records on fishing activities and catch amounts. The project area supports four types of commercial fishing – purse seining, trawling, drift gillnetting, and trap fishing – as well as various forms of recreational fishing. The proposed project could affect commercial or recreational fishing in the area by temporarily limiting access to waters in the project area. Additionally, fishing gear could become snagged on the cables in the project area, resulting in economic losses or safety concerns. Temporary economic impacts to trawlers and recreational fishers may result during installation of the cables. Pursuant to the federal Submarine Cable Act (47 U.S.C. 21 para. 24) all vessels are required to maintain a distance of at least one nautical mile from a cable vessel conducting repairs and one-quarter mile from the buoy of a vessel intended to mark the position of a cable when being laid or out of order.

Commercial fishing in the project area, however, is already directed in part by the Joint Oil/Fisheries Liason Office (JO/FLO), which was established to minimize interactions between oil industry operations and commercial fishing activities. JO/FLO establishes vessel traffic corridors to reduce conflicts between vessels in the project area. Additionally, the pipeline and cable areas through which the new cables will extend include other nearby oil and gas infrastructure (i.e. platforms, pipelines, and cables), many of which are on or above the seafloor, and are noted on nautical charts and known to area fishing interests.

JO/FLO also maintains records identifying fishing gear lost in the project area, the causes of those losses, if known, and claims arising from those losses against oil and gas-related project owners. The Applicant reviewed JO/FLO records to determine the effects of the existing cables and pipelines on fishing gear and found there were no incidents of claims in the vicinity of the

proposed or existing routes. Of the types of fishing that occur in the project area, only trawling is likely to have the potential over the long-term to snag the cables. Because of the weight of the cables (approximately 18 pounds per foot) and their smooth and low profile on the seafloor, the likelihood of snagging is low. Additionally, the cable routes were selected in part to avoid hard bottom substrate where portions of the cables could be suspended across topographic features. If the cables were to cause damage to fishing gear or vessels, a claim could be filed through the process established by JO/FLO.

Another measure that could be taken to further reduce the potential for snagging is to bury the cables. However, for this proposed project, burying the cables would likely not result in reduced impacts to the fisheries, given the history of no lost fishing gear in the area, and given the cable routes being almost entirely over soft bottom substrates where the cables are likely to be partially embedded due to natural sedimentation processes.
Although the above characteristics are likely to result in avoidance or minimization of most fishery impacts, the proposed project includes a number of measures to further mitigate for possible impacts, including conformity to JO/FLO procedures regarding vessel corridors and notification, filing of a Notice to Mariners with the U.S. Coast Guard describing the project location and timing, recovery of items lost overboard when feasible, and others.

In addition, project-related measures and conditions to protect marine biological resources, water quality, and other coastal resources as described elsewhere in this report will also act to avoid and minimize impacts on commercial and recreational fishing.

Conclusion:

With the mitigation measures described above, the Commission finds that the project is protective of commercial and recreational fishing and is therefore consistent with Coastal Act Section 30234.5.

4.4.5 Public Access and Recreation

Coastal Act Section 30211 states that:

> *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Coastal Act Section 30220 states:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

The project may affect public access and recreation due to the presence of work vessels in areas used by the public in coastal waters and near a state beach. This area includes part of El Capitan State Beach. Recreational activities in the are include beach use, boating, and fishing,

The proposed project as described in the MND/EA includes measures to avoid or minimize impacts to public access and recreation. These include limiting the work period for nearshore

work, where access and recreation are most prevalent, to approximately one week, so any disruption is expected to be short-term and minimal. The Applicant's Notice to Mariners (described in Section 4.4.4 above) will also serve as notice to recreational fishing vessels and boaters in the project area. The exclusion areas described in that notice will be relatively short-term (estimated four to eight weeks) and will move during that time so that boaters will not be excluded from a given area for longer than a week or two.

Conclusion:

With the project's mitigation measures, the Commission finds that the proposed project will not significantly interfere with public access and recreation and is therefore consistent with Coastal Act Sections 30211 and 30220.

4.4.6 Cultural Resources

Coastal Act Section 30244 states:

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

Historical and cultural resources are defined as those areas of the land and marine environment that possess historical, cultural, archaeological or paleontological significance, including sites, structures, or objects significantly associated with, or representative of earlier people, cultures and human activities and events. Nearshore excavation and offshore cable-laying and anchoring activities have the potential to disturb prehistoric sites that may have been established prior to the most recent sea level rise or more recent cultural sites, such as shipwrecks. The original cultural resources survey for the SYU project in the 1980s identified four possible cultural resource sites offshore, with three in OCS waters and one in State waters. The two closest to proposed project work areas are outside the cable-laying corridor but may potentially be affected by work vessels anchoring in the area. Because the Applicant has selected a dynamic positioning vessel to do the cable-laying and removal work, anchoring would only take place in an emergency situation. Support vessels requiring anchoring are expected to be located outside the area where the cultural resources might be adversely affected. ROV surveys along the cable route identified no features believed to be shipwrecks or cultural sites.

The Applicant has proposed several mitigation measures to avoid or reduce the potential for adverse impacts to offshore cultural resources, including:

- Providing vessel operators the coordinates of known offshore sites and requiring contractors to avoid activities within 300 feet of these sites. If work within these buffer areas is necessary, it would only take place after an additional geophysical or ROV survey, and would require MMS and State Lands Commission approval.

- Including a review of avoidance procedures in pre-construction environmental compliance meetings with contractors.
- Using an ROV during cable installation to identify any potential cultural resource sites. If a potential site is discovered, the contractor is to stop cable-laying operations and notify the MMS for further direction, which could include requiring additional survey information, changing the cable route to avoid the site, or other measures.

To further ensure the project conforms to Coastal Act policies, **Special Condition 12** requires the Applicant to submit to the Executive Director for review and approval any proposal to work within the buffer areas established around known sites or in areas that may affect sites discovered during project surveys.

Conclusion:

With the project's mitigation measures and conditions, the Commission finds that the project will not adversely impact archaeological or paleontological resources and is therefore consistent with Coastal Act Section 30244.

4.4.7 Air Quality

Coastal Act Section 30253(3) states:

> *New development shall:*
>
> *(3) Be consistent with the requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.*

The proposed project is located within the South Central Coast Air Basin and its air emissions are regulated by the Santa Barbara Air Pollution Control District (the APCD). Emissions related to project activities have a potential to increase onshore concentrations of pollutants. The primary pollutants of concern related to this project are oxides of nitrogen (NOx), which are precursors to ozone and for which Santa Barbara County is in nonattainment.

The APCD determined that the cable laying portion of the proposed project is a construction activity that would result in emissions under 25 tons for any regulated pollutant, and is therefore exempt from permit requirements. It also determined that the cable removal portion of the project is a demolition activity that will require a permit. Before issuing the permit, the APCD will ensure that demolition-related emissions will either be under the threshold of significance or will be adequately mitigated to be less than significant. In addition, the County's approval is conditioned upon the Applicant providing an Emissions Reporting Plan, tracking fuel use and emissions from project-related equipment, and providing other measures that will be used by the APCD in determining compliance with applicable air quality rules and regulations.

Conclusion:

The Commission finds that with these measures in place, the project will be implemented in a manner consistent with the requirements of the APCD and is therefore consistent with Coastal Act Section 30253(3).

5.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT

As lead agency under the California Environmental Quality Act (CEQA), Santa Barbara County on February 19, 2003 certified a mitigated negative declaration (MND) for the proposed project. The MND was done jointly with the Environmental Assessment (EA) performed by the MMS, the lead agency for purposes of National Environmental Policy Act (NEPA) compliance.

The Commission's permit process has also been designated by the State Resources Agency as the functional equivalent of the CEQA environmental impact review process. Pursuant to section 21080.5(d)(2)(A) of the CEQA and section 15252(b)(1) of Title 14, California Code of Regulations (CCR), the Commission may not approve a development project "if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment." The Commission finds that only as conditioned are there no feasible less environmentally damaging alternatives or additional feasible mitigation measures that would substantially lessen any significant adverse impact which the activity may have upon the environment, other than those identified herein. Therefore, the Commission finds that the project as fully conditioned is consistent with the provisions of the CEQA.